EPA Modeling Plan Spurs States' Threat To Return SO2 Program To Agency

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Some state officials are warning that EPA's recent guidance outlining its plans to rely in part on modeling to determine attainment with its sulfur dioxide (SO2) ambient air standard will prove so onerous to air quality planners that they might return their SO2 programs to EPA, forcing the agency to craft plans to cut states' SO2 emissions.

Industry officials are welcoming the stepped-up state opposition to the modeling plan -- reinforced in a guidance that EPA quietly released March 24 -- saying they share many of states' concerns on the SO2 plan, including that EPA did not provide for public comment on the attainment demonstration method; that modeling data are overly conservative and that EPA is changing the definition for what steps an "unclassifiable" attainment area will have to take.

Sources also suggest there is a developing split on the issue between individual state and local air agencies and the National Association of Clean Air Agencies (NACAA), which represents them. One NACAA source says the group has not yet taken a position on the issue but is hearing a host of concerns from members.

EPA's guidance says states should use a combination of emissions monitoring and modeling for SO2 attainment determinations, prompting concerns that the approach could overestimate nonattainment problems. States face a June 3 deadline to submit to EPA their recommendations for which areas should be classified as in attainment or nonattainment with EPA's new one-hour SO2 standard of 75 parts per billion issued in June, though EPA says it will likely designate most areas of the country as "unclassifiable" for an interim period in order to give states time to complete the modeling.

Attainment designations are key for states because being classified in nonattainment requires states to develop state implementation plans (SIPs) outlining the potentially costly emissions controls they will impose on SO2 sources within their jurisdiction in order to cut pollution and meet the standard. Areas designated in attainment must craft "maintenance" SIPs that outline the measures they will take to stay in attainment.

But one state source says EPA in shifting to modeling for attainment says it will reject monitored data even if monitors are specifically sited to capture emissions from large sources. "Even if they have a monitor at the site showing [a source] is well in attainment, EPA is not going to classify it in attainment. They are going to force states to do modeling before they classify in attainment," the source says.

States and industry are also objecting to EPA's insistence that the modeling assumptions be highly conservative, including the assumption that every facility in a state is operating at full capacity, which would boost emissions and the likelihood that areas would fall into nonattainment with the NAAQS.

The source says EPA may make the modeling and attainment requirements "so onerous that states rebel and hand their SO2 programs back to the agency." Under the Clean Air Act, that would force EPA to implement its SO2 NAAQS through federal implementation plans, an alternative to SIPs through which EPA writes and oversees the pollution control measures for states. "We could say, 'It's too much for us, here you go.'"

Conference Call

EPA held a call last week with state regulators who were not shy about expressing their strong opposition to the attainment shift, several sources familiar with the call say. But on the call EPA officials reiterated their plan to rely on modeling in lieu of monitoring for attainment demonstration purposes, due to concerns that monitoring does not capture the highest emissions concentrations. Additionally, the SO2 standard is likely only the first standard to see such a shift to modeling data, with similar changes also planned for nitrogen dioxide and ozone, sources note.

As a result of the modeling focus, EPA could for an interim period classify most areas of the country as "unclassifiable" for attainment purposes, giving states more time to collect monitoring data for their attainment recommendations. EPA officials on the call told states they believe many air rules in the works -- including the proposed Clean Air Transport rule cap-and-trade program to cut power plants' SO2 and nitrogen oxide emissions, and air toxics rules for boilers and utilities -- will bring most areas into attainment with the SO2 standard.

States however are objecting to EPA's planned approach for implementing the standard, with a second state air official warning that the unclassifiable attainment designations could be legally vulnerable if environmentalists sue over the agency's delay in making final determinations on attainment and nonattainment areas.

The first state air official adds that because the modeling assumptions EPA is requiring are false, the new approach will result in a needless paperwork exercise that will not have any real-world environmental benefits but will dramatically impair resource-constrained states and would harm industry in poor economic times.

Alternatives to the EPA approach floated by states include dropping the requirement to use modeled data for attainment determinations or basing the modeling assumptions on the past five years of actual emissions data, rather than assuming every facility is operating at capacity, as EPA's guidance currently assumes.

An EPA spokeswoman says the agency "anticipates initially designating areas using 2008-2010 monitoring data, and any refined dispersion modeling results provided by states." The spokeswoman notes areas that have monitoring and modeling demonstrating violations would be designated in nonattainment, while areas with monitoring and modeling showing no violations would be designated in attainment. "All other areas would be designated as 'unclassifiable.'"

The agency also defends the monitoring/monitoring designations approach, noting it is "consistent with EPA's historic practice of requiring modeling to judge compliance for SO2 NAAQS implementation," and says the agency plans to provide more details on the approach later this year.

The NACAA source says that there is potential for a split among its members on the issue, and that it is a "tough one." The source says that conservative modeling requirements may prove difficult but adds that the overarching problem may be that the standard itself is so stringent, making it difficult for states to meet.

The concern over the SO2 guidance comes as a federal appeals court April 7 rejected a request by states and industry to stay implementation of the SO2 NAAQS pending outcome of litigation challenging the standard and as environmentalists are seeking to intervene on EPA's behalf.

'Approaching The Ridiculous'

EPA's insistence on shifting to modeling data with strict assumptions in lieu of monitored data is "approaching the ridiculous," according to the second state air official. "They are just creating the worst-case scenario and are going to do a designation based on that. . . . I see a fight on this issue," the source says.

The first state source says another concern is that the agency is intending to require areas that can show they meet the SO2 NAAQS to develop much more stringent maintenance plans for how they intend to stay in attainment. "Historically, those [maintenance plans] have been pretty straightforward. But in this case" EPA has said it intends to treat maintenance plans like a detailed nonattainment SIP, the source says.

States also note the "clock is ticking" for SIPs, with final versions due in 2013, three years after EPA finalized the standard. "But EPA hasn't told us what the requirements are, and we are already a year in or so," the first state source says. "And they've done no analysis on how much work it's going to be. . . . The theory is, you model it, show a theoretical exceedance, reduce allowable emissions and remodel back into compliance."

EPA also set a 2017 deadline to have any new enforceable SO2 limits in permits, whether sources modify their permits between now and then. The upshot will be, "You don't ever have an area in nonattainment, but you have a whole lot of work," the source complains, saying EPA will require states to modify permits to include SO2 limits to

recognize what sources are already doing, for example, adding scrubbers to meet air toxic rules. An SO2 limit would not normally be included in an air toxics permit because SO2 is a criteria pollutant.

Industry sources meanwhile are applauding states for "standing up" to EPA on the issue, noting industry has many of the same concerns with the states about the impacts of the SO2 guidance.

In the SO2 NAAQS, which was finalized last summer, EPA said it was changing its interpretation of an unclassifiable area as one that would have to include a modeled attainment demonstration by August of 2013, one industry source says. Prior to the rule, an unclassifiable area had to do nothing, the source notes.

But an environmentalist says EPA is correct to shift its attainment demonstration requirements from monitors to modeling because oftentimes monitors are not in the same places that pollution is. And the source questions state concern that EPA's plan to label much of the nation as unclassifiable for SO2 as legally vulnerable. "EPA has done that before and I am not aware of a court decision that said it was illegal. States' real concern is that they be designated in attainment," the source says. "States have political reasons to want to be in attainment." -- *Dawn Reeves*